

CLAIMS

What is claimed is:

1. A battery operated chain saw comprising:

a frame comprising a housing and a chain bar, wherein the frame forms a front handle and a rear handle;

an electric motor connected to the frame; and

a battery coupled to the electric motor,

wherein the battery is located at a position on the frame proximate the front handle to provide a front-to-rear chain saw center-of-gravity located proximate the front handle.

2. A battery operated chain saw as in claim 1 wherein the frame comprises molded polymer members forming housing members connected to each other to form the housing, front handle and rear handle.

3. A battery operated chain saw as in claim 2 wherein the housing members form a guard connected to the front handle and extending in front of the front handle.

4. A battery operated chain saw as in claim 1 wherein the housing forms a battery receiving area located beneath the front handle.

5. A battery operated chain saw as in claim 1 wherein the housing forms a battery receiving area located at a lateral side of a portion of the housing which houses a drive which connects the motor to a saw chain of the chain bar.

6. A battery operated chain saw as in claim 1 wherein the battery is removably connected to the frame proximate a section of the housing which houses the electric motor.

7. A battery operated chain saw as in claim 1 wherein the battery is housed in a removable power pack, and wherein the power pack is located spaced from a front-to-rear centerline of the frame located along the chain bar, and wherein the power pack comprises an electrical coupling side which is not located on a lateral side of the power pack.

8. A battery operated chain saw as in claim 1 wherein the battery is housed in a removable power pack, and wherein the power pack is removably connected to the frame proximate a lateral side of the frame proximate the front handle, and wherein the power pack comprises an electrical coupling side facing a forward direction of the chain saw.

9. A battery operated chain saw as in claim 1 wherein the battery is housed in a removable power pack, and wherein the power pack comprises a mechanical connection latch adapted to be contacted and moved by a user, and wherein the latch is not located on a lateral side of the power pack.

10. A chain saw comprising:

a frame comprising a housing and a chain bar, wherein the frame forms a front handle and a rear handle;

an electric motor connected to the frame; and

a power pack coupled to the electric motor, wherein the power pack is removably connected to the frame proximate a lateral side of the frame proximate the front handle.

11. A chain saw as in claim 10 further comprising means for providing a front-to-rear chain saw center-of-gravity located proximate the front handle.

12. A chain saw as in claim 10 wherein the frame comprises molded polymer members forming housing members connected to each other to form the housing, front handle and rear handle.

13. A chain saw as in claim 12 wherein the housing members form a guard connected to the front handle and extending in front of the front handle.

14. A chain saw as in claim 10 wherein the housing forms a battery receiving area located beneath the front handle.

15. A chain saw as in claim 10 wherein the housing forms a battery receiving area located at a lateral side of a portion of the housing which houses a drive which connects the motor to a saw chain of the chain bar.

16. A chain saw as in claim 10 wherein the battery is removably connected to the frame proximate a section of the housing which houses the electric motor.

17. A chain saw as in claim 10 wherein the power pack is located spaced from a front-to-rear centerline of the frame located along the chain bar, and wherein the power pack comprises an electrical coupling side which is not located on a lateral side of the power pack.

18. A chain saw as in claim 10 wherein the power pack is removably connected to the frame proximate a lateral side of the frame, and wherein the power pack comprises an electrical coupling side facing a forward direction of the chain saw.

19. A chain saw as in claim 10 wherein the power pack comprises a mechanical connection latch adapted to be contacted and moved by a user, wherein the latch is not located on a lateral side of the power pack.

20. A chain saw comprising:

a frame comprising a housing and a chain bar, wherein the frame forms a front handle and a rear handle;

an electric motor connected to the frame; and

a power pack removably connected to the frame, wherein the power pack is located spaced from a front-to-rear centerline of the frame located along the chain bar, and wherein the power pack comprises an electrical coupling side which is not located on a lateral side of the power pack.